

**Mississippi CROP**

***A Summary of CROP Landscape Analyses Results***

**Presented by**

**Catherine M. Mater**

**President—Mater Engineering**

**Senior Fellow—The Pinchot Institute for Conservation**

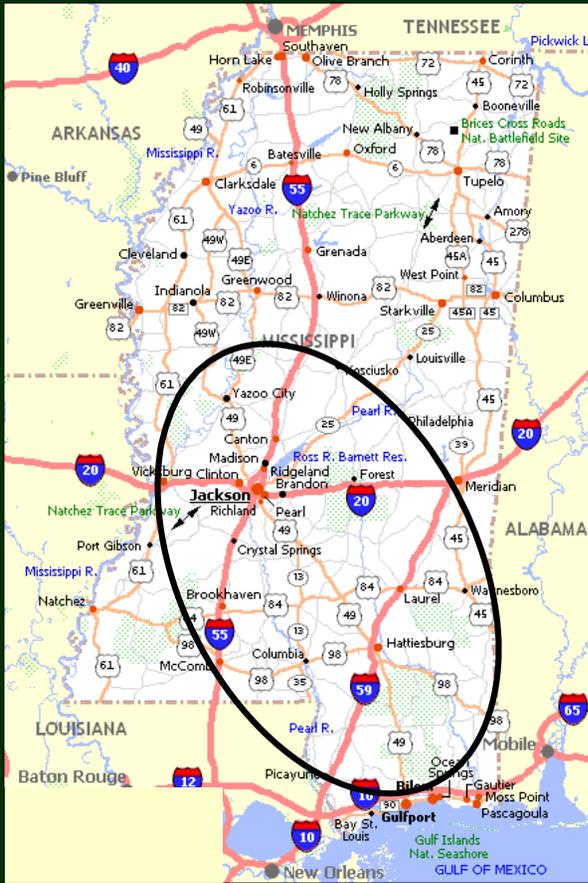
**Corvallis, Oregon; Washington, DC**

***Tel: 541-753-7335 Fx: 541-752-2952***

***E-mail: [catherine@mater.com](mailto:catherine@mater.com)***

# Mississippi CROP

## Mississippi CROP: Mt. Olive, MS (centerpoint) (100 miles N/S; 60 miles E/W)



- *4 National Forests*
- *5 Ranger Districts*
- *43 Counties*
- *State Lands*
- *16<sup>th</sup> Section Lands*
- *Private Lands (Katrina-downed)*

**National Forests: 5 Ranger Districts**

• **Bienville NF:**

Bienville RD

• **Delta NF:**

Delta RD

• **De Soto NF:**

De Soto RD

Chickasawhay RD

• **Homochitto NF:**

Homochitto RD

**State Lands:**

- **Mississippi Dept. of Wildlife, Fisheries, & Parks**

## 43 Counties:

- Sharkey
- Claiborne
- Amite
- Copiah
- Yazoo
- Attala
- Scott
- Lawrence
- Walthall
- Pearl River
- Jackson
- Forrest
- Wayne
- Jasper
- Newton
- Perry
- Jones
- Lauderdale
- Warren
- Franklin
- Lincoln
- Madison
- Holmes
- Rankin
- Smith
- Covington
- Lamar
- Harrison
- George
- Clarke
- Neshoba
- Issaquena
- Jefferson
- Pike
- Hinds
- Humphreys
- Leake
- Simpson
- Jefferson Davis
- Marion
- Hancock
- Stone
- Greene

***CROP also includes 16<sup>th</sup> Section lands***: (lands managed by state for benefit of school systems)

- 43 counties in CROP landscape with 16<sup>th</sup> Section lands
- Data & diameter breakout received from MIFI.
- Between '01 through '05, amount in CROP landscape removed was:

**Pine: 99 mmbf + 396,000 gT**

**Hardwood: 32 mmbf + 114,000 gT**

- Of 43 counties, only 18 experienced annual removals between '01 – '05
- Estimates in CROP based only on those counties with historical annual removals. Averaged annual removal volumes calculated.

***CROP also included analysis on Katrina-downed pine & hardwood:***

- **Data for 15 southern counties supplied by MIFI.**
- **Assumption for diameter, decay rate, & remaining usable material (blue stain, heartwood, & hardwood) supplied by MIFI, with technical assistance also provided by MSU (Dr. Terry Amburgey**

What we asked for:

- Volume (by mmbf, green tons, ccf, etc.)
  - Diameter sizes <4" 4"-7" 7"-9" 9"-12" >12"
  - Species (all species evaluated for resource flow)
  - Harvest "type": fuel load reduction, timber sale, etc.
  - Location of resource offering
- 
- NEPA Phase
  - Road accessibility
- } USFS Pilots

**So, let's take a look at  
the final results . . .**

## Overall:

Year	Total Biomass (227,625 gT)	% of 5-yr volume
2007	37,605	16%
2008	34,800	15%
2009	15,190	7%
2010	51,890	23%
2011	88,140	39%

*Biomass = 17%  
(up to 7" dbh)*

Total Small Log (109.547 mmbf)	% of 5-yr volume
21.855	20%
16.92	15%
25.677	24%
24.815	23%
20.28	18%

*Small Logs = 41%  
(>7" – 12" dbh)*

Total Large Log (111.491 mmbf)	% of 5-yr volume
28.586	26%
17.66	16%
32.609	29%
25.486	23%
7.15	6%

*Large Logs = 42%  
(>12" dbh)*

## Who's providing what?

Agency	5-yr total <i>Biomass (gT)</i>	5-yr total <i>Small Log (mmbf)</i>	5-yr total <i>Large Log (mmbf)</i>	% of 5-yr total
<b>De Soto NF</b>	136,250	63.123	38.063	48%
Bienville NF	62,400	25.32	25	24%
Homochitto NF	28,975	17.985	35.278	22%
Delta NF	0	3	12	6%
MS DWF & P	0	.119	1.15	<1%

Is there a change?

Overall – *Yes!*

A 3% reduction in planned removal off all National forests in CROP landscape.

	'01-'05 (mmbf)	'07-'11 (mmbf; includes gT)	% change
<i>Delta NF</i>	10.95	15	37%
<i>Bienville NF</i>	38.33	62.8	61%
<i>De Soto NF</i>	104.05	128.44	23%
<i>Homochitto NF</i>	120.48	59.06	(-51%)
<i>Total</i>	273.81	265.3	(-3%)

## Where's the change?

Let's look at the De Soto NF:

... an increase of 23% in  
planned volume removal.

	'01-'05 (mmbf)	'07-'11 (mmbf; includes gT)
<i>Southern Yellow Pine</i>	62.72	108.436
<i>Waxy Species</i>	0	20
<i>Oaks (red, black, white)</i>	1.78	0
<i>Hardwoods</i>	9.83	0
<i>Other Softwoods</i>	29.71	0
<i>Total</i>	104	128.436

*But . . . for the Homochitto NF a different story . . .*

**. . . a more impactful change  
with 60% reduction in  
planned volume removal  
during the next 5 years**

	'01-'05 (mmbf)	'07-'11 (mmbf; includes gT)
<i>Southern yellow pine</i>	72.62	49.43
<i>Oaks (red, white, black)</i>	2.07	3.84
<i>Hardwood – other</i>	11.371	5.76
<i>Softwoods – other</i>	34.39	0
<i>Total</i>	120.45	59.06

## *A closer look on resource offering . . .*

**De Soto NF:** (gT= 136,250; Small log = 63.123 mmbf; Large log = 38.063 mmbf)

Ranger Districts	5-yr total (Biomass = gT) <7" dbh	5-yr total Small log (mmbf) 7"-12" dbh	5-yr total Large log (mmbf) >12" dbh
De Soto RD	100,000	26.873	9.063
Chickasawhay RD	36,250	36.25	29

## *A closer look on resource offering . . .*

### *Bienville, Homochitto, & Delta NFs:*

<b>Ranger District</b>	<b>5-yr total (Biomass = gT) &lt;7" dbh</b>	<b>5-yr total Small log (mmbf) 7"-12" dbh</b>	<b>5-yr total Large log (mmbf) &gt;12" dbh</b>
<b>Bienville NF (RD)</b>	<b>62,400</b>	<b>25.32</b>	<b>25</b>
<b>Homochitto NF (RD)</b>	<b>1,592</b>	<b>2.092</b>	<b>1.435</b>
<b>Delta NF (RD)</b>	<b>0</b>	<b>3</b>	<b>12</b>

## *A closer look on resource offering . . .*

*MS Agencies:* (*gT* = 0; *Small log* = .119 mmbf; *Large log* = 1.15 mmbf)

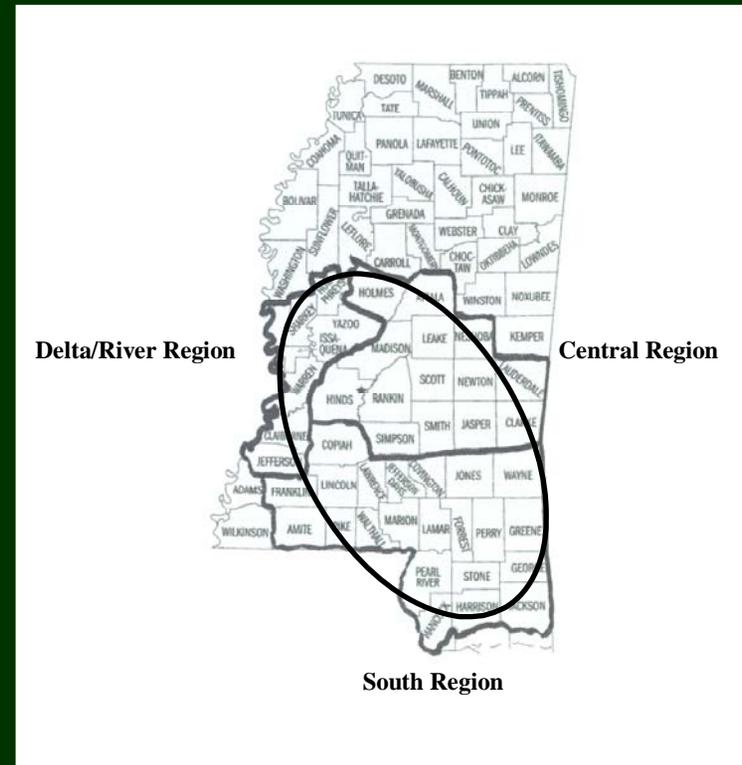
<b>Agency</b>	<b>5-yr total (Biomass = gT) &lt;7" dbh</b>	<b>5-yr total Small log (mmbf) 7"-12" dbh</b>	<b>5-yr total Large log (mmbf) &gt;12" dbh</b>
<b>MS DWF &amp;P</b>	<b>0</b>	<b>.119</b>	<b>1.15</b>

<i>NF &amp; State removals by Species*</i>		<b>5-yr total (Biomass = gT)</b>	<b>5-yr total Small log (mmbf)</b>	<b>5-yr total Large log (mmbf)</b>
<b>Red oak</b>	(3% of 5-yr. total)	1,152	2.5386	6.387
<b>Hardwoods</b>	(2% of 5-yr. total)	192	.9231	3.0645
<b>Green ash</b>	(1% of 5-yr. total)	0	.36	1.44
<b>Gum species</b>	(4% of 5-yr. total)	4,472	5.1311	3.9823
<b>Southern yellow pine</b>	(80% of 5-yr. total)	157,245	87.4895	93.734
<b>Oak species</b>	(2% of 5-yr. total)	3,000	3.365	1.9078
<b>Poplar</b>	(1% of 5-yr. total)	974	1.0432	.5522
<b>Hickory</b>	(0% of 5-yr. total)	590	.697	.4232
<b>Waxy species</b>	(8% of 5-yr. total)	60,000	8	0

*\*9 species analyzed in CROP, but Southern Yellow Pine comprises 80% of the total 5-yr volume*

## 16<sup>th</sup> Section lands:

- 1) Three regions (Delta River, Central, & Southern)
- 2) 43 counties in CROP but only 18 with annual removal performance from '01 through '05.
- 3) For this CROP, used averaged annual removal from those 18 counties to derive projected annual CROP offering.



16<sup>th</sup> Section lands:

18 counties (in CROP landscape) with annual removal performance:

South Region: (9 of 22 counties)

- Amite
- Copiah
- Franklin
- Jefferson Davis
- Jones
- Lincoln
- Marion
- Walthall
- Wayne

Central Region: (7 of 14 counties)

- Clarke
- Hinds
- Jasper
- Newton
- Scott
- Simpson
- Smith

Delta/River Region: (2 of 7 counties)

- Jefferson
- Warren

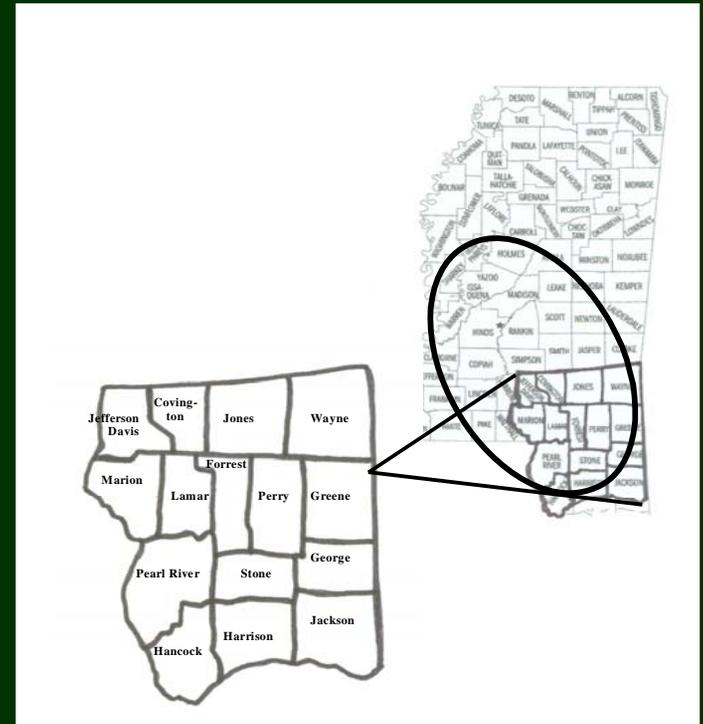
## 16<sup>th</sup> Section lands:

Projected annual removal based on averaged annual removal from '01 – '05:

	Biomass gT	Small log (mmbf)	Large log (mmbf)
<i>Central Region</i>	31,621	2.18	2.65
<i>South Region</i>	35,910	3.16	3.77
<i>Delta Region</i>	3,581	.8	1.32
<i>Annual totals</i>	71,112	6.14	7.74

## Katrina-downed resource (one-time volume):

- 15 southern counties evaluated.
- Initial downed data collected by Mississippi Institute of Forest Inventory (MIFI).
- Diameter breakout, decay rates, usable blue stain (pine) volume, heartwood (pine) volume, & hardwood volume determined (with MIFI & MSU guidance).
- Volume breakouts provided on county-by-county basis.
- All volume <9” for pine and <7” for hardwood calculated as biomass.



Collectively, four (4) of the 15 counties contribute the 40% or more of the total Katrina-downed pine volume:

- Harrison
- Pearl River
- Perry
- Stone

Five (5) of the 15 counties contribute 40% or more of the total Katrina-downed hardwood volume:

- Greene
- Harrison
- Pearl River
- Stone
- Wayne

**Katrina-downed resource:**

*Initial projections:*

- **pine:** 1.958 mmbf (7% in biomass; 48% mmbf in small log; 40.1% mmbf in large log)
- **hardwood:** 1.358 mmbf (10.6% in biomass; 37.2% mmbf in small log; 52.2% mmbf in large log)

*Current projections:*

- **pine (49% already removed):** 994.3 mmbf (46% in biomass; 24% mmbf in small log; 30% mmbf in large log)
- **hardwood (39% already removed):** 833.38 mmbf (31% in biomass; 35% mmbf in small log; 34% mmbf in large log)

*Katrina-downed resource: (Projections based on best guess current conditions)*

	biomass (gT)	Small log – 7”-12” (mmbf)			Large log - >12” (mmbf)		
		blue stain	heartwood	hardwood	blue stain	heartwood	hardwood
<i>pine</i>	2,261,764	45.25	193.88	—	82.93	219.89	—
<i>hardwood</i>	1,275,840	—	—	293.83	—	—	284.38

*Summary:*

<i>usable blue stain (pine)</i>	128 mmbf
<i>usable heartwood (pine)</i>	413.7 mmbf
<i>usable hardwood</i>	578.21 mmbf
<i>biomass</i>	3,537,604 gT

## Overall CROP Resource Offering: (total for 5 years)

	Small log (7"-12")		Large log (>12")		Biomass	
	(mmbf)	% of type offering	(mmbf)	% of type offering	(gT)	% of type offering
<i>NF &amp; State</i>	109.55	41%	111.49	42%	227,625	17%
<i>16<sup>th</sup> Section</i>	30.795	22%	38.73	28%	355,560	50%
<i>Katrina-downed (one-time volume)</i>	532.46	29%	587.2	32%	3,537,604	39%
<b><i>Totals</i></b>	<b>673.30</b>		<b>737.42</b>		<b>4,120,789</b>	

## So . . . What does all this mean?

- *Excluding Katrina-downed volume*, opportunity for inviting new production investment into the region is tight, but do-able:
  - ~ 28 mmbf/yr of small logs available for processing (includes ~ 6 mmbf/yr of 16<sup>th</sup> Section lands removal) is less encouraging for investment, as *volume may be too small for a constructing a dedicated small-log processing mill*. The volume, however, is *sufficient to encourage the construction of a small log processing line* to an existing milling operation.
  - Another 30 mmbf/yr of large logs (includes ~ 7 mmbf/yr of 16<sup>th</sup> Section lands removal) for processing in existing operations may also be made available.

## So . . . What does all this mean?

- From a biomass basis:
  - The proposed biomass to be generated from the National Forests is likely significantly underestimated. The 16<sup>th</sup> Section lands on average generated three times *less* small and large log volume over the last 5 years than what is expected from the National Forests in the CROP landscape during the next five years, but generated over 50% more biomass volume.
  - The NF and 16<sup>th</sup> Section biomass volumes combined at ~ 117,000 gT/yr is still considered a small volume offering for typical biomass investors. Further, high variability in annual biomass offering from NF lands in the CROP landscape make the risk factor even higher.
  - However, the six-fold increase per year in biomass that could be generated from Katrina-downed resource in the CROP landscape should be of interest to potential investors.

## So . . . What does all this mean?

- *Aside from biomass, the updated volume of Katrina-downed resource for solid wood production should not be ignored!*
  - 25 mmbf/year of usable blue stain pine to be sold into the characterwood market;
  - 82 mmbf/year of usable heart pine; and
  - Over 115 mmbf/year of hardwood.

## Resource Offering Maps (ROMS):

*Here's what you get for each species . . .*

- ✓ Who will supply?
- ✓ When will supply be offered?
- ✓ How much will be offered?
- ✓ What diameter size will it be offered in?
- ✓ Will supply be consistent and levelized over time to invite purchase and investment?

*For each species:*

- ✓ **Locator map** per specific supplier
- ✓ **Summary sheet**
- ✓ **Detailed supply breakouts** by volume, diameter, and year

*Let's look at Southern Yellow Pine  
as an example . . .*

# Mississippi CROP

Mississippi: ***Southern Yellow Pine*** CROP offering/removal '07 – '11  
(gT = 157,245 / S = 87.489 mmbf / L = 93.734 mmbf)

ROM # SYP 1.1

SYP = southern yellow pine

**Delta NF:**

A **Delta RD**

**Homochitto NF:**

B **Homochitto RD** \* (gT = 24,995 / S = 12.746 mmbf / L = 31.691 mmbf)

**De Soto NF:**

C **De Soto RD** (gT = 40,000 / S = 18.87 mmbf / L = 9.06 mmbf)

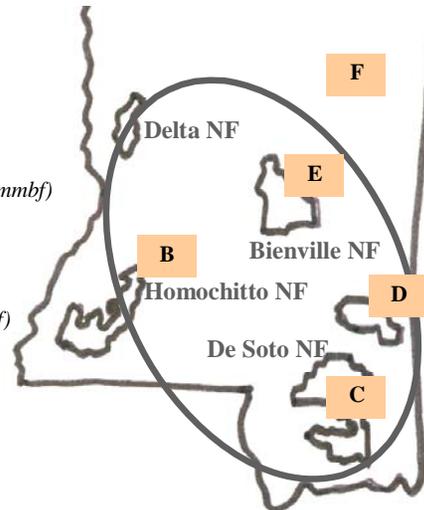
D **Chickasawhay RD** (gT = 36,250 / S = 36.25 mmbf / L = 29 mmbf)

**Bienville NF:**

E **Bienville RD** (gT = 56,000 / S = 19.55 mmbf / L = 22.85 mmbf)

**MS DWF & P:**

F **MS DWF & P** (gT = 0 / S = .07 mmbf / L = 1.13 mmbf)



***Locator Map***

\*italics/bold = species offering in CROP

# Mississippi CROP

Mississippi: **Southern Yellow Pine** CROP offering/removal '07 - '11  
 (gT = 157,245 / S = 87,489 mmbf / L = 93,734 mmbf)

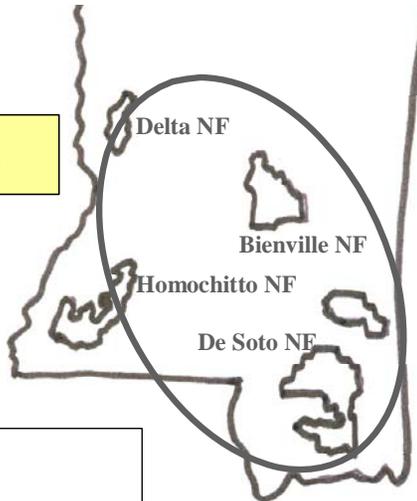
ROM # SYP 1

## Summary Sheet

gT = green tons (up to 7" dbh)  
 S = small log mmbf (>7"-12" dbh)  
 L = large log mmbf (>12" dbh)

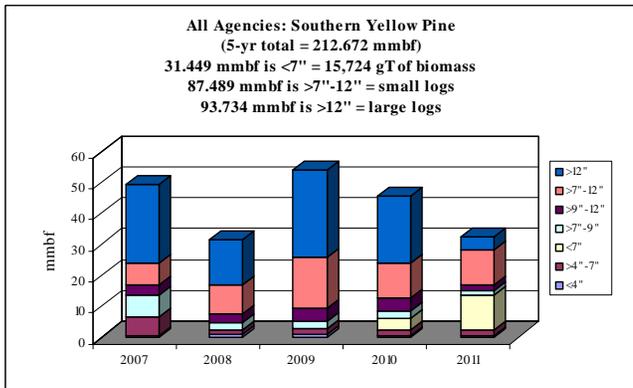
**Homochitto NF: 1 RD - 23%**  
 (gT = 24,995 / S = 12,746 / L = 31,691)

**MS DWF & P - <1%**  
 (gT = 0 / S = 0.07 / L = 1.13)



**Bienville NF: 1 RD - 25%**  
 (gT = 56,000 / S = 19,55 / L = 22.85)

**De Soto NF: 2 RDs - 51%**  
 (gT = 76,250 / S = 55.123 / L = 38.063)



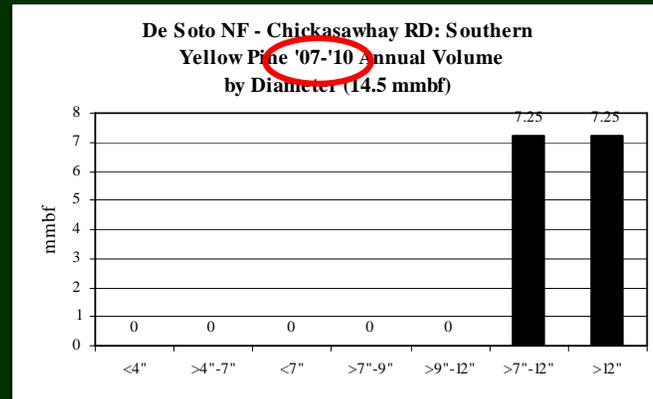
	gT	mmbf	
	Biomass	Small Log	Large Log
2007	32725	17.51	25.153
2008	12300	14.51	14.59
2009	14190	22.7815	28.392
2010	30890	17.918	21.269
2011	67140	14.77	4.33
Totals	157245	87.4895	93.734
%	15%	41%	44%
mmbf	31.449		

212.6725

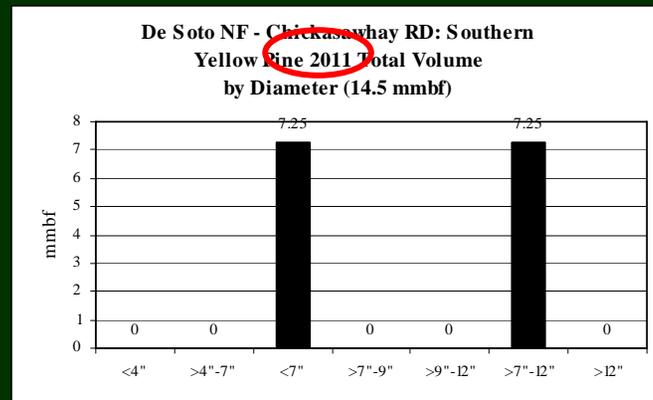
# Mississippi CROP

## Detailed Breakout by Supplier

<b>Southern Yellow Pine</b> <b>De Soto NF: Chickasawhay RD</b>		<b>5-yr = 72.5 mmbf; 14.5 mmbf/yr</b>
		<ul style="list-style-type: none"> <li>Level supply from year to year</li> </ul>
gT = 36,250		<ul style="list-style-type: none"> <li>&lt;4" = 0% (0 mmbf)</li> <li>&gt;4"-7" = 0% (0 mmbf)</li> <li>&lt;7" = 10% (7.25 mmbf)</li> </ul>
S = .3625		<ul style="list-style-type: none"> <li>&gt;7"-9" = 0% (0 mmbf)</li> <li>&gt;9"-12" = 0% (0 mmbf)</li> <li>&gt;7"-12" = 50% (36.25 mmbf)</li> </ul>
L = .29		<ul style="list-style-type: none"> <li>&gt;12" = 40% (29 mmbf)</li> </ul>



'07 - '11



SO . . . with CROP, we're able to look at:

- *performance between different public agencies* to identify needed levilization of supply; and
- *performance between ranger districts in a single NF* to see where levilization of supply offering might be needed .

*Let's take a look ...*

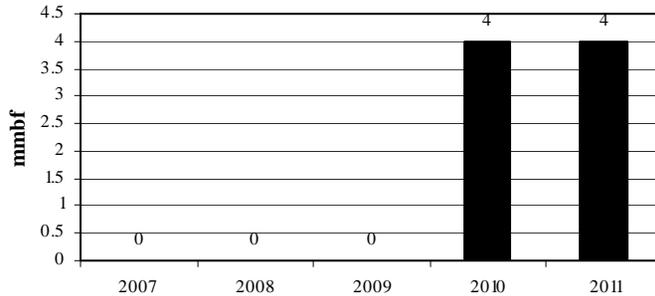
## Southern Yellow Pine: De Soto NF - 2 RDs – *biomass offerings*

(% of NF offering of 76,250 gT)

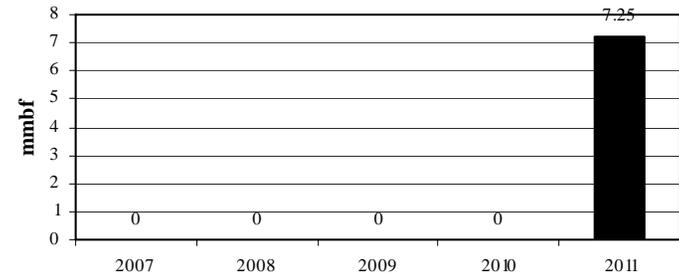
*De Soto RD - 52%*

*Chickasawhay RD - 48%*

De Soto NF: De Soto RD: Southern Yellow Pine Total 5-yr Biomass (up to <7" dbh) by Specie (8 mmbf = 40,000 gT)



De Soto NF: Chickasawhay RD: Southern Yellow Pine Total 5-yr Biomass (up to <7" dbh) by Specie (7.25 mmbf = 36,250 gT)



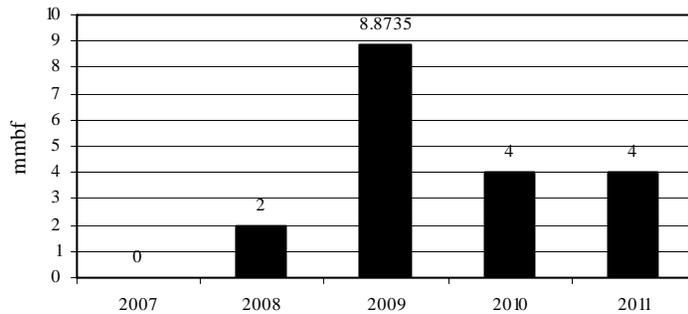
**Unlevelized supply in both RDs with no offering in most of the years.**

## Southern Yellow Pine: De Soto NF 2 RDs – small log offerings (% of NF offering of 55.123 mmbf)

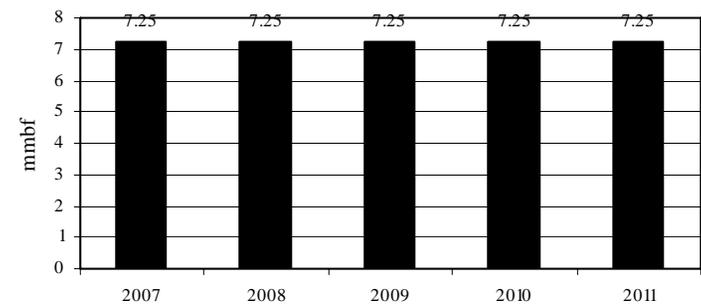
*De Soto RD - 34%*

*Chickasawhay RD - 66%*

De Soto NF: De Soto RD: Southern Yellow Pine Total 5-yr Small Log (>7"-12" dbh) by Specie (18.873 mmbf)



De Soto NF: Chickasawhay RD: Southern Yellow Pine Total 5-yr Small Log (>7"-12" dbh) by Specie (36.25 mmbf)

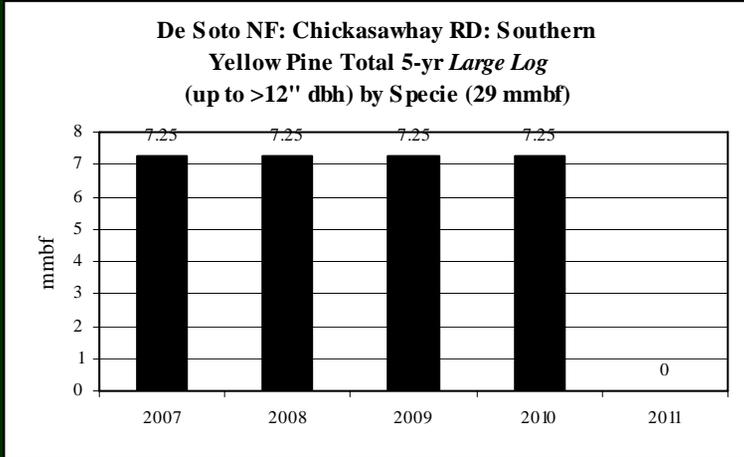
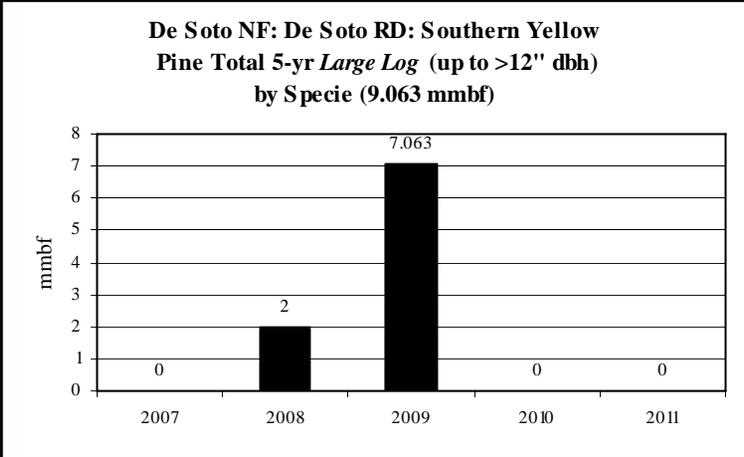


**Unlevelized supply  
in 1 of 2 RDs**

## Southern Yellow Pine: De Soto NF 2 RDs – *large log offerings* (% of NF offering of 38.063 mmbf)

**De Soto RD - 24%**

**Chickasawhay RD - 76%**



**Relatively levelized supply in only one RD.**

*How levelized will the supply be for all  
suppliers of Southern Yellow Pine  
compared to other species offering?*

*Let's take a look . . .*

## Levelized supply for five years?

(R = relatively)

	gT Biomass	Small Logs		Large Logs		
		yes	no	yes	no	yes
<i>Southern yellow pine</i> (80%)		✓	R			✓
<i>Waxy species</i> (8%)		✓		✓	n/a	
<i>Gum species</i> (4%)		✓	R		R	
<i>Red oak</i> (3%)	R			✓		✓
<i>Hardwoods</i> (2%)	R		✓		✓	
<i>Oak species</i> (2%)		✓		✓	R	
<i>Poplar</i> (1%)		✓		✓		✓
<i>Green ash</i> (1%)	n/a		✓		✓	
<i>Hickory</i> (<1%)		✓		✓		✓

Looking at the Southern Yellow Pine . . .

- ✓ There will be an unlevelized supply of green tonnage biomass in this specie offering over the next five years. Variations range from 15,000 to 88,000 gT per year.
- ✓ This will impact almost 70% of the total biomass volume for all species to be offered in the CROP landscape (excluding 16<sup>th</sup> Section & Katrina volumes).
- ✓ There will also be a an unlevelized supply of large log volume in this specie offering in the CROP landscape that will affect 84% of the total large log volume.
- ✓ Small log volume variations per year are less dramatic.

*Here's how it looks on an agency-by-agency basis . . .*

## Levelized Annual Supply? (Total 5-yr volume)

Y = yes  
 N = no  
 R = relatively  
 O = no offering  
 N/A = not applicable

		<u>Southern Yellow Pine</u> (212.672 mmbf; includes gT)		
		Biomass	Small log	Large log
<b>De Soto NF</b>	(51% of 5-yr vol.)			
	De Soto	N/A	N	N
	Chickasawhay	N	Y	R
<b>Bienville NF</b>	(25% of 5-yr vol.)			
	Bienville	R	R	R
<b>Homochitto NF</b>	(23% of 5-yr vol.)			
	Homochitto	N	N	N
<b>MS DWF &amp; P</b>	(<1% of 5-yr vol.)	N/A	Y	N

## Levelized Supply? *Southern Yellow Pine* – biomass (157,245 gT)

*R* = relatively

*NS* = no supply offering

	yes	no	Comments
<b>Overall</b>		✓	from 12,300 gT to 67,140 gT/yr
<b>De Soto NF</b>			
De Soto RD		✓	from 0 gT to 20,000 gT/yr
Chickasawhay RD		✓	from 0 gT to 36,250 gT/yr
<b>Bienville NF</b>			
Bienville RD		✓	from 8,800 to 17,800 gT/yr
<b>Homochitto NF</b>			
Homochitto RD		✓	from 1,090 to 4,390 gT/yr
<b>Delta NF</b>			
Delta RD			NS
<b>MS DWF &amp; P</b>			NS

## Levelized Supply? Southern Yellow Pine – small log (87.489 mmbf)

R = relatively

NS = no supply offering

	yes	no	Comments
<b>Overall</b>	R		from 14.51 mmbf – 22.781 mmbf variations/yr
<b>De Soto NF</b>			
De Soto RD		✓	from 2 mmbf to 8.873 mmbf
Chickasawhay RD	✓		7.25 mmbf/yr
<b>Bienville NF</b>			
Bienville RD		✓	from 3.5 mmbf to 5.25 mmbf
<b>Homochitto NF</b>			
Homochitto RD		✓	from 0 mmbf to 6.45 mmbf
<b>Delta NF</b>	NS		
<b>MS DWF &amp; P</b>	R		from .01 mmbf to .02 mmbf/yr

## Levelized Supply? Southern Yellow Pine – large log (93.734 mmbf)

*R = relatively*

*NS = no supply offering*

	yes	no	Comments
<b>Overall</b>		✓	from 4.33 mmbf – 28.392 mmbf variations/yr
<b>De Soto NF</b>		✓	
De Soto RD		✓	from 0 mmbf to 7.063 mmbf
Chickasawhay RD	R		7.25 mmbf/yr save for '11
<b>Bienville NF</b>			
Bienville RD	R		from 4.15 mmbf to 5.25 mmbf
<b>Homochitto NF</b>		✓	
Homochitto RD		✓	from 0 mmbf to 12.413 mmbf
<b>Delta NF</b>	NS		
<b>MS DWF &amp; P</b>	R		from .18 mmbf to .29 mmbf/yr

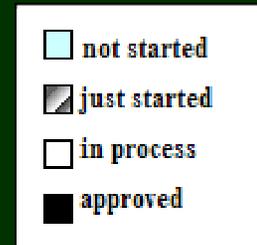
**What about NEPA?**  
**It's important to know!**

*... here's how it looks*

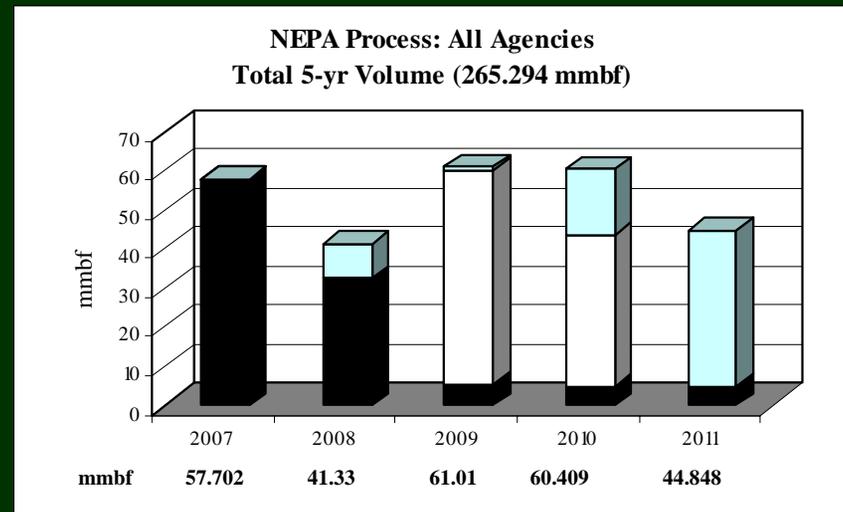
## NEPA Picture for CROP Landscape

All NF lands:

99% of 5-yr total = (265.563 mmbf; includes gT as mmbf)



	<i>mmbf</i>	<i>% of total</i>
<i>Approved</i>	105.396	40%
<i>In process</i>	96.058	35%
<i>Just started</i>	0	0%
<i>Not started</i>	66.84	25%



*75% of CROP resource offering either NEPA approved or in-process*



*. . . but story best told on agency-by-agency basis.*

*Let's look at the De Soto NF as an example . . .*

## NEPA Risk Rating

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Lowest	Low	Medium	High	Highest

### For low risk rating, 3 key desired attributes:

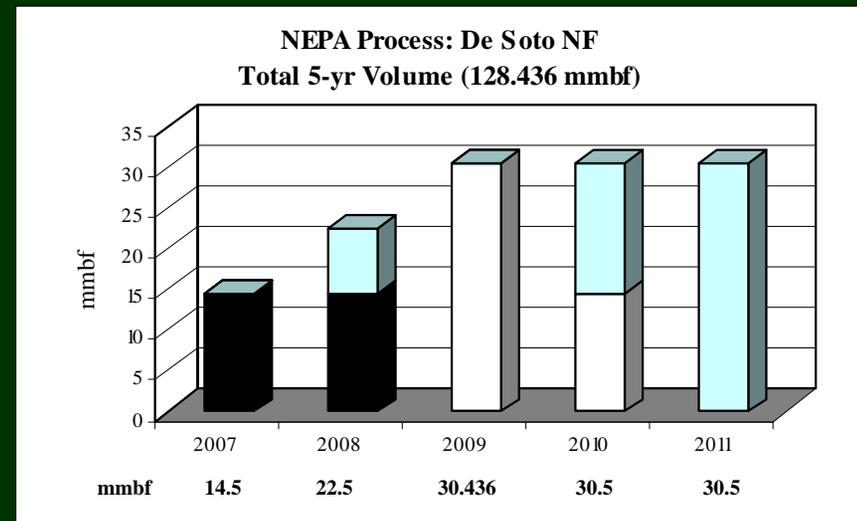
- ✓ Volume *approved* in first 2 years, followed by *in-process*.
- ✓ Consistency in supply; no dramatic gaps from year to year (eg: *approved/not started/in-process*).
- ✓ Overall – no major emphasis on *just started* or *not started*.

## NEPA Phase

**De Soto NF:** Total 5-yr volume (128.436 mmbf; includes gT as mmbf)



	<i>mmbf</i>	<i>% of total</i>
<i>Approved</i>	<b>29</b>	<b>23%</b>
<i>In process</i>	<b>44.936</b>	<b>35%</b>
<i>Just started</i>	<b>0</b>	<b>0%</b>
<i>Not started</i>	<b>54.5</b>	<b>42%</b>



## NEPA Risk Rating

**Agencies:** Ranger Districts in the De Soto NF

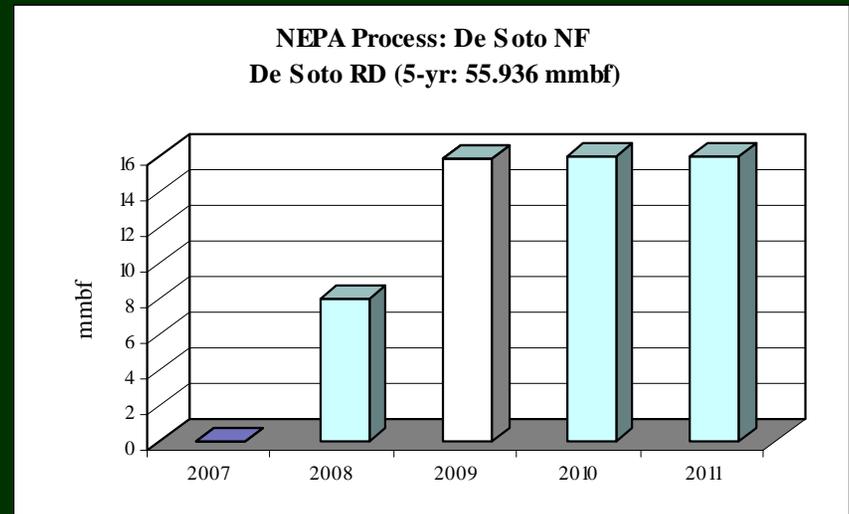
(includes gT as mmbf)	1 Lowest	2 Low	3 Medium	4 High	5 Highest	Comments
De Soto (55.936 mmbf)					✓	72% of 5-yr volume not started in NEPA process
Chickasawhay (72.5 mmbf)			✓			80% approved or in process years 1 - 4

## NEPA Phase

**De Soto RD: (55.936 mmbf; includes gT as mmbf)**



	<i>mmbf</i>	<i>% of total</i>
<i>Approved</i>	<b>0</b>	<b>0%</b>
<i>In process</i>	<b>15.936</b>	<b>28%</b>
<i>Just started</i>	<b>0</b>	<b>0%</b>
<i>Not started</i>	<b>40</b>	<b>72%</b>

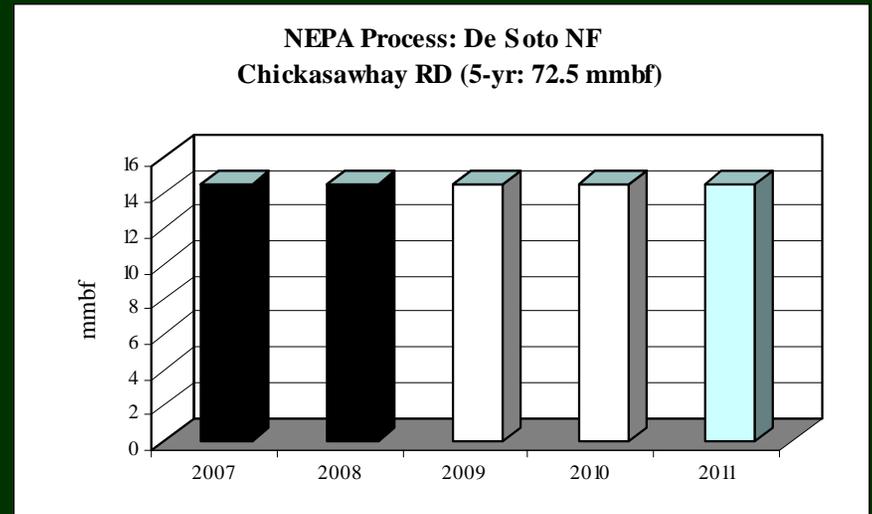


## NEPA Phase

Chickasawhay RD: (72.5 mmbf; includes gT as mmbf)



	<i>mmbf</i>	<i>% of total</i>
<i>Approved</i>	<b>29</b>	<b>40%</b>
<i>In process</i>	<b>29</b>	<b>40%</b>
<i>Just started</i>	<b>0</b>	<b>0%</b>
<i>Not started</i>	<b>14.5</b>	<b>20%</b>



*What about road access to supply? No problem here . . .*

Agency	5-yr total volume mmbf (includes gT as mmbf)	Affected by No Current Road Access	
		% of total volume affected	species affected
Delta NF	15	0%	none
Homochitto NF	59.058	0%	none
De Soto NF	128.4365	0%	none
Bienville NF	62.8	0%	none
MS DWF & P	1.269	0%	none
<b>Total</b>	<b>266.5635</b>	<b>0%</b>	

*Conclusions for Mississippi CROP*

*Opportunity in the making! . . .*

- *Excluding Katrina-downed material*, annual volumes in the small & large log stratum sufficient to re-open closed milling operations in the region, and establish new small log processing line.
- NEPA risk looks very good for NF projections, but . . .
- More levelization & coordination between public agencies from year to year required to invite investor interest.

*Conclusions for Mississippi CROP*

*Opportunity in the making! . . .*

*For Katrina-downed material*, annual volumes in biomass, small & large log stratus sufficient to:

- Construct new biomass & solid wood processing facilities in the CROP landscape.
- Create new markets for ‘Hurricane Pine’ (blue stain pine) product. Demand already there, but nation-wide marketing campaign needed to standardize new characterwood grade.

*But, obstacles are no light matter . . .*

- Access to Katrina-downed material difficult as it is primarily located on private lands, and federal funding to help clean-up efforts on private lands returned to Congress in December 2006!

*For more information:*

**Catherine M. Mater:**

President – Mater Engineering  
Senior Fellow – The Pinchot Institute for Conservation  
Corvallis, Oregon; Washington, DC  
tel: (541) 753-7335 fax: (541) 752-2952; cell: (541) 760-5526  
*E-mail: catherine@mater.com*

**Edmund Gee:**

Nat'l Woody Biomass Utilization Team Leader  
Nat'l Partnership Coordinator USFS  
Washington DC  
tel: (202) 205-1787 fax: (202) 205-1045 cell: (202) 236-5153  
*E-mail: eagee@fs.fed.us*